

ABSTRACT OF THE DISCLOSURE

Tolerance of the immune system for self differentiation antigens can be overcome and an immune response stimulated by administration of a therapeutic differentiation antigen. The therapeutic differentiation antigen is altered with respect to the target differentiation antigen in the individual being treated (i.e., the differentiation antigen to which an immune response is desired) in one of three ways. First, the therapeutic differentiation antigen may be syngeneic with the target differentiation antigen, provided that therapeutic differentiation antigen is expressed in cells of a species different from the individual being treated. For example, a human differentiation antigen expressed in insect or other non-human host cells can be used to stimulate an immune response to the differentiation antigen in a human subject. Second, the therapeutic differentiation antigen may be a mutant form of a syngeneic differentiation antigen, for example a glycosylation mutant. Third, the therapeutic differentiation antigen may be a differentiation antigen (wild-type or mutant) of the same type from a species different from the individual being treated. For example, a mouse differentiation antigen can be used to stimulate an immune response to the corresponding differentiation antigen in a human subject. Administration of altered antigens in accordance with the invention results in an effective immunity against the original antigen expressed by the cancer in the treated individual.

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